

CLASS SPECIFICATION
County of Fairfax, Virginia

CLASS CODE: 5125

TITLE: ECOLOGIST I

GRADE: S-21

DEFINITION:

Under direct supervision, performs entry-level technical and developmental tasks in support of limited portions of various water and/or terrestrial resources and biological science activities; and performs related work as required.

DISTINGUISHING CHARACTERISTICS OF THE CLASS:

Positions allocated to the Ecologist I class either perform work which is, and will continue to be, more routine, less complex and narrower in scope than work at the Ecologist II level; OR serve in a trainee capacity with noncompetitive promotional progression to the full-performance Ecologist II level.

ILLUSTRATIVE DUTIES:

(The illustrative duties listed in this specification are representative of the class but are not an all-inclusive list. A complete list of position duties and unique physical requirements can be found in the position description.)

Monitors physical, chemical, and biological conditions of the County's streams, lakes, ponds and other water bodies and/or terrestrial ecosystems and wildlife;

Prepares data for analysis and inclusion in water quality and/or ecosystem monitoring reports;

Assists in assessing the impacts of development and stormwater management systems on the ecological health of County streams and stream valleys and/or the impacts from human land disturbance, overabundant wildlife species, non-native invasive species and other factors on natural communities/ecosystems;

Performs monitoring of stormwater infrastructure and streams and/or terrestrial communities and populations;

Assists in the preparation of Virginia Pollutant Discharge Elimination System (VPDES) permit reports;

Assists in performing and reviewing Resource Protection Area (RPA) and wetland delineation studies and/or inventories and field data collection for terrestrial community characterization/management;

Organizes data to assist in developing stormwater and watershed and/or natural resource management plans;

Responds to citizen and business community questions regarding the condition of streams and/or terrestrial or aquatic ecosystems;

Participates in public outreach activities including the development of brochures, reports and web pages;

Participates in public meetings and educational programs;

Maintains contact databases;

Participates in training and coordinating volunteers in water quality monitoring and/or non-native invasive species, vegetative or wildlife monitoring and management to support countywide efforts.

REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES:

(The knowledge, skills and abilities listed in this specification are representative of the class but are not an all-inclusive list. The knowledge, skills and abilities in the lower levels of the Ecologist class series are also required.)

General knowledge of stream ecology, terrestrial ecology, botany, bioassessments protocols, and stream habitats;
General knowledge of local, federal and state regulations, codes, and ordinances related to the Federal Clean Water Act and/or the National Environmental Policy Act;
General knowledge of wetland regulations and permitting requirements;
Knowledge of fish, plants and/or wildlife communities and field identification to the species level;
Knowledge of benthic macro invertebrate communities and laboratory identification to the genus level;
Knowledge of laboratory and field safety procedures, and the handling, storage and transfer and/or application of flammable and/or toxic chemicals;
Knowledge of stream and/or vegetative community classification methodologies;
Knowledge of Wetland Delineation techniques including the U.S. Corps of Engineers' Wetland Identification and Delineation Manual;
Knowledge of personal computers, associated hardware, and networked environments for the development, storage and dissemination of environmental data;
Ability to collect samples and perform field analysis of water chemistry parameters;
Ability to calibrate and maintain field equipment used in water quality and natural resource monitoring;
Ability to analyze and manage environmental data using databases, spreadsheets, and statistical programs;
Ability to communicate technical and semi-technical issues effectively, both orally and in writing, to a wide range of audiences;
Ability to carry field equipment and hike long distances over rough terrain;
Ability to operate a motor vehicle.

EMPLOYMENT STANDARDS:

Any combination of education, experience, and training equivalent to the following:
Graduation from an accredited college or university with a Bachelor's degree in aquatic ecology, ecology, biology, botany, zoology, geography, environmental science, limnology, natural resource management, or a related field.

CERTIFICATES AND LICENSES REQUIRED:

Possession of a valid motor vehicle driver's license.

NECESSARY SPECIAL REQUIREMENTS:

None.

REVISED:	July 26, 2013
REGRADED:	August 23, 2010
ESTABLISHED:	February 17, 2004